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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CHARLES A JOHNSON			EXAMINER	
UNISYS CORP PO BOX 64942			TRAN, HAI V	
MS 4772 ST PAUL, MN 55164			ART UNIT	PAPER NUMBER
5111162, MIX		•	2611 DATE MAILED: 07/08/2003	10

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
•					
Office Action Summany	09/304,906	SIPPLE ET AL.			
. Office Action Summary	Examiner ,	Art Unit			
TI MAN INO DATE of this communication of	Hai Tran	2611			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on	·				
2a) This action is FINAL. 2b) ⊠ T	his action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4) Claim(s) 1-20 is/are pending in the application	n.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/	or election requirement.	•			
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)⊠ The drawing(s) filed on <u>25 November 2002</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)⊠ The proposed drawing correction filed on is: a)□ approved b)⊠ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
1. Certified copies of the priority documen	ts have been received.	·			
2. Certified copies of the priority documents have been received in Application No					
 Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152) 6) Other:					
S. Patent and Trademark Office TO-326 (Rev. 04-01) Office A	ction Summary	Part of Paper No. 10			

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/03/2003 has been entered.

Response to Arguments

Applicant's arguments filed on 06/03/2003 have been fully considered but are most in view of the new ground(s) of rejection.

Drawings

The corrected or substitute drawings were received on 06/03/20032.

The drawings (Fig. 1, 2, 4-9 and 12) are again objected to because the Applicant fails to comply to the request of <u>labeling all the labeled numbers with corresponding labels/names</u>, i.e. in Fig. 1, labels number 1, 14, 16, 22, 24 etc.....

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 6, 11-13 and 16-17 are rejected under 35 U.S.C. 102(e) as being unpatentable by Hendricks et al. (US 6201536).

Regarding claim 6, Hendricks discloses an apparatus comprising:

- a. Two subscribing television receivers each of which providing a separate spaced apart service request for a video program (Col. 13, lines 10-Col. 14, lines 33);
- b. A memory (Fig. 3A, element 262) having said video program in spooled (store a data in queue, where it awaits its turn to be processed) form corresponding to said service request (Fig. 2, 4, 5, 6A, 7 and 8; Col. 7, lines 25-43; Col. 9, lines 13-38; Col. 11, lines 4-13); and
- c. A processor 215 responsively coupled to said memory (Fig. 3A, element 262) and said two subscribing cable television receivers 292s which streams said spooled video program to said two subscribing television receivers 292s (Col. 23, lines 62-67 and Col. 28, lines 30-55).

Regarding "as a single stream if said separate spaced apart service request are spaced apart by less than a given time period <u>and which streams said spooled</u> <u>video program to said two subscribing TV receivers as two streams if said separate</u> <u>spaced apart service requests are spaced apart by greater than a given time period</u>". Hendricks discloses that subscribers requested the same program within the specified time period of a timer, i.e. 5 minutes; the system will transmit the same

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requested program on the same channel. Once the timer is expired and additional requests for the same program is received, the additional requests are handled like an initial request (new request of the same program with different stream); therefore, the timer is restarted and reset to a predetermined time, i.e. 5 minutes, and the same program requested is transmitted on another channel with different stream of the same program requested previously. Thus, Hendricks meets and encompasses the claimed limitation "in a plurality of streams spaced apart by a given time... if the separate spaced apart service requests are spaced apart by greater than a given time period" (Col. 18, lines 63-Col. 20, lines 62).

Regarding claim 11, Hendricks (Col. 18, lines 63-Col. 20, lines 62) discloses in a VOD environment, subscribers requested the same program within the specified time period of a timer, i.e. 5 minutes; the system will transmit the same requested program on the same channel. Once the timer is expired and additional requests for the same program is received, the additional requests are handled like an initial request (new request of the same program with different stream) and the timer is restarted and reset to a predetermined time, i.e. 5 minutes, and the same program requested is transmitted on another channel with different stream of the same program requested previously. Thus, Hendricks meets all limitations claimed in claims 11 such as:

a. First means for requesting a video on demand program at a first time (1st subscriber requests a video program);

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- b. Second means for requesting said video on demand program at a later second time (2nd subscriber requests a video program);
- c. Means responsively coupled to said first requesting means for storing said requested video on demand program; and
- d. means responsively coupled to said storing means for streaming said requested video on demand program (Col. 23, lines 62-67 and Col. 28, lines 30-55) once if a difference between said second time and said first time is less than a predetermined interval and twice from the storing means if the difference is greater than the predetermined interval (same program requested and the time requested from the 1st and 2nd subscribers falls within the time period set by the timer; Col. 18, lines 63-Col. 20, lines 62).

Regarding claim 12, Hendricks further discloses wherein said first requesting means further comprises a subscriber box (specifically Fig. 6A, in which the information paths between headend 208 and nodes 288 are bi-directional with upstream path 246; Fig. 4,5,6A and 7, element 292s).

Regarding claim 13, Hendricks further discloses wherein said streaming means further comprises an industry standard personal computer (system with CPU, RAM, ROM, EPROM, EEPROM, PCI, RS-232, RS-244 or IEEE-488 compatible; Col. 11, lines 14-65+).

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Regarding claims 16, a method of providing video on demand services of method claim 16 is analyzed with respect to claim 11;

Regarding claim 17, the limitation of method claim 17 "streaming said corresponding video program to said first subscriber at said third time and second streaming said corresponding video program to said second subscriber at a fourth time if said difference between said second later time and said first time is greater than a predetermined interval" is met Hendricks because the time requested of the same program as the 1st subscriber from the 2nd subscriber does not fall within the timer period belong to the 1st subscriber; Thus Once the timer is expired (from the 1st subscriber) and additional requests for the same program is received (from the 2nd subscriber), the additional requests (from the 2nd subscriber) are handled like an initial request and the timer is restarted and reset to a predetermined time, i.e. 5 minutes. Therefore, the same program requested from the 2nd subscriber is transmitted on another channel with different stream of the same program requested previously from the 1st subscriber; see Col. 18, lines 63-Col. 20, lines 62.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 6201536) in view of Chen et al. (US 4636942).

Regarding claim 1, Hendricks discloses a video on demand system for supplying requested video data to a plurality of subscriber receivers (Fig. 3A-C, 4-8), the system comprising:

- a. A first processor (File Server 215 of Fig. 3A) that spools (store a data in queue, where it awaits its turn to be processed) said requested video data (Fig. 2, 4, 5, 6A, 7 and 8; Col. 7, lines 25-43; Col. 9, lines 13-38; Col. 17, lines 44-48; Col. 18, lines 17-30).
- b. A video server memory (Fig. 3A, element 262) responsively coupled to said first processor (File Server 215 of Fig. 3A) in which said spooled requested video data is stored (Col. 12, lines 39-50; Col. 28, lines 30-55);

Hendricks does not clearly discloses "<u>A second processor</u>" responsively coupled to said video server memory (Fig. 3A, element 262) and the subscriber receiver 292 which streams said spooled requested video data from said video server memory (Fig. 3A, element 262) to the plurality of subscriber receivers 292 (Col. 23, lines 62-67 and Col. 28, lines 30-55).

Chen discloses a multiprocessor system wherein each processor configures to perform related task independently (Col. 2, lines 63-Col.3, lines 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks' file server 215 with a plurality processors, as taught by Chen, so each processor could be configured to operate independently whereby

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independent tasks of different jobs may be performed, thereby avoids the problems of underutilization and provide a higher system throughput.

Regarding the claimed limitation "in a plurality of streams spaced apart by a given time", Hendricks discloses that subscribers requested the same program within the specified time period of a timer, i.e. 5 minutes, the system will transmit the same requested program on the same channel. Once the timer is expired and additional requests for the same program is received, the additional requests are handled like an initial request and the timer is restarted and reset to a predetermined time, i.e. 5 minutes, and the same program requested is transmitted on another channel (stream). Thus, Hendricks meets and encompasses the claimed limitation "in a plurality of streams spaced apart by a given time" (Col. 18, lines 63-Col. 20, lines 62).

3. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 6201536) in view of Chen et al. (US 4636942), and further in view of Unisys Cellular Multiprocessing Architecture White Paper pages 1-8.

Regarding claims 2 and 3 Hendricks fails to disclose the video on demand system wherein video server said memory further comprises a Unisys CMP memory platform and wherein said second processor further comprises an industry compatible, Windows NT based processor.

Unisys White Paper discloses a Unisys CMP memory platform and wherein said second processor further comprises an industry compatible; Windows NT

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based processor (whole document). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks' video-on-demand system in view of Chen to use a Unisys CMP memory platform and wherein the second processor further comprises an industry compatible, Windows NT based processor, as taught by Unisys white Paper, so to take the advantage of the well known "Intel" /NT based processor and to further improve the performance of Hendricks' s VOD system by consolidating all the network components into one enterprise server and also to lower the cost for managing the system (page 8 of White Paper).

Regarding claim 4, Hendricks further discloses wherein said first processor 260 further comprises a transaction server (performs database management, order and billing) responsively coupled to said subscribing receiver and said video server memory (Col. 12, lines 29-55).

Regarding claim 5, Hendricks further discloses wherein said requested video data further comprises MPEG-2 format (Col. 24, lines 1-2).

 Claims 7-10, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 6201536) in view of Unisys Cellular Multiprocessing Architecture White Paper pages 1-8.

Regarding claims 7, 8 and 14, Hendricks fails to disclose the video on demand system wherein video server said memory further comprises a Unisys CMP

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memory platform and wherein said second processor further comprises an industry compatible, Windows NT based processor.

Unisys White Paper discloses a Unisys CMP memory platform and wherein said second processor further comprises an industry compatible; Windows NT based processor (whole document). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks' video-on-demand system to use a Unisys CMP memory platform and wherein the second processor further comprises an industry compatible, Windows NT based processor, as taught by Unisys white Paper, so to take the advantage of the well known "Intel"/NT based processor and to further improve the performance of Hendricks' s VOD system by consolidating all the network components into one enterprise server and also to lower the cost for managing the system (page 8 of White Paper).

Regarding claim 9, Hendricks further discloses wherein said spooled video program further comprises MPEG-2. (Col. 23, lines 64-Col. 24, lines 2).

Regarding claim 10, Hendricks further comprises a transaction server (performs database management, order and billing) responsively coupled to said subscribing receiver and said video server memory (Col. 12, lines 29-55).

Regarding claim 15, Hendricks further discloses in a video on demand system, a transaction subsystem responsively coupled to said first requesting means and said storing means for spooling said requested video on demand program into said storing means and for managing archival storage of video streams in a

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hierarchical storage management system that is integrated with the management application and requires no manual intervention (Col. 34, lines 60-Col. 35, lines 20).

 Claim 18 is rejected under 35 U.S.C. 103(a) as obvious over Hendricks et al. (US 6201536).

Regarding claim 18, Hendricks discloses the predetermined time interval (timer) typically should be set to expire after a few minutes; However, the presetting time of the timer does not preclude an Ordinary Skill in the Art to preset the timer to be one minute as claimed. Thus, it is reasonably obvious that one Ordinary Skill in the Art would set the timer to "one minute" so Hendricks's system would further reduce the waiting time period of subscribers to receive the VOD program requested.

Claims 19-20 are rejected under 35 U.S.C. 103(a) as obvious over Hendricks et al.
 (US 6201536) in view of Ong (US 5815662).

Regarding claim 19, Hendricks does not clearly disclose "fast forwarding said streaming in response to a fast forward from said first subscriber".

Ong discloses fast forwarding said streaming in response to a fast-forward from said first subscriber (Col. 7, lines 65- Col. 8, lines 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks to have a VCR viewing function as fast forward, as taught by Ong, so to provide to users an enjoyable way to control the viewing sequence of a VOD program.

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Regarding claim 20, Hendricks further discloses performing subscriber accounting to enable billing said subscriber for said video on demand request (performs database management, order and billing; Col. 12, lines 29-55).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Hai Tran

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Ht:ht June 29, 2003